

TOUR DESCRIPTIONS – 2006 (Registration Required)

- **ADS-B – Building 300, 2nd Floor (15 people Employees & High School)**
“ADS-B is the future of air traffic control. Instead of using radar data to keep aircraft at safe distances from one another, signals from Global Positioning Satellites will give air traffic controllers and pilots more accurate information to help keep aircraft safely separated in the sky and on runways.” Come learn how these signals are converted to provide information such as A/C type, speed, flight # and is A/C is turning, climbing, or descending. *1 Demo 8:50 am departure*
- **ANG - NJ Air National Guard 177th FW (50 People Ages 11 & Up)**
“The 177th Fighter Wing (FW), located at the Atlantic City International Airport in Pomona, New Jersey, is tasked with the missions of protecting the sovereignty of the United States airspace during peacetime and mobilizing people and equipment to support the North American Aerospace Defense (NORAD) Command during wartime. The 177th FW also supports the citizens of New Jersey by protecting life and property, preserving the peace, order and public safety when called upon by the Governor. The 177th FW supports the local community through participation in volunteer efforts which add value to the community.” See some of their aircraft, equipment, and weapons. Hear about some of their missions. *1 Demo 8:45 am departure*
- **ATC Lab Package – Building 300, 3rd Floor: (25 people Ages 11 & Up)**
Experience the feeling of being an Air Traffic Controller in the Standard Terminal Automation Replacement System (STARS) Lab. You might even get the opportunity to sit down at the ATC display with a controller.

Have you ever wondered how many aircraft are flying at any given time? Do you know what such a display would look like? Come visit the Enhanced Traffic Management System (ETMS) lab. "ETMS is the system used by our Traffic Management Specialists to predict, on national and local scales, traffic surges, gaps, and volume based on current and anticipated airborne aircraft. Traffic Management Specialists evaluate the projected flow of traffic into airports and sectors, then implement the least restrictive action necessary to ensure that traffic demand does not exceed system capacity." We might even be able to isolate the display to see what is happening in our area. This is a package where groups will switch. *1 Demo 8:50 am departure*
- **Computer Test Bed – Building 300, 3rd Floor (15 people Employees & High School)** Experience computer networking. See the test drives and the full-blown network where testing of operating systems is conducted. Also learn some things about computer repair. *1 Demo 8:55 am departure*
- **Fire House – Building 302 : (25 people Ages 5-6 & 7 & Up)**

See the airport Crash & Rescue vehicles. Learn about the HPRV. Meet the firemen and see equipment used to help fight fires. 1 Demo for 5-6 only 10:05 am departure; 1 demo for 7 & up only 2:05 pm departure

- **Federal Air Marshal Demo: (25 people Ages 11 & Up)**
Oral demos and Alpha Range, Air Marshall training explained, Demo at steel bravo range. 2 Demos 10:05 am departure; 12:55 pm departure
- **Egg Harbor Township K-9 Demo –Building 300 Fenced area:** (All Ages)
Meet some of Egg Harbor Township’s K-9 Officers and their dogs. Learn about the procedures in training. Watch the dogs in action. 1 Demo 8:55 am departure
- **Free Flight Technology Integration Laboratory (FFTIL): 20 people** (Employees & High School)
The Technical Integration Lab (TIL) provides a networked environment that connects this lab with the Center & Terminal systems at the WJHTC & supports the testing of and human-in-the-loop simulation with peripheral air traffic systems.

For this event we plan to permit visitors to play the role of a pilot and control an aircraft in flight and land it. We will also show live traffic on one of the systems that is presently operational in the field. 1 Demo 2:05 pm departure
- **Ground Test Vehicle (B747 SP) (15 people Ages Employees & High School)**
Wide-bodied systems ground test article used to examine hidden fire capabilities and potential fire suppression applications of on-aircraft generated nitrogen. You will be able to get on board the 747 to see the test equipment. 1 Demo 10:05 am departure
- **National Airport Pavement Test Facility – Building 296: (20 people - Ages 11 & Up)**
The 900 ft long X 60 ft wide pavement was developed to accommodate heavier, more complex aircraft. Subsystems of the pavement will be explained. If available you could possibly ride the “giant” test vehicle as it travels over the different pavement sections. – 1 Demo 2:05 pm departure
- **R & D Package – Buildings 211 & 204: (20 people – Employees & High School)**
Visit both the FASTER & Wind Tunnel Labs. The FASTER lab tests the structural integrity and continued airworthiness of transport aircraft structures through computational and experimental analyses. Explored are fatigue damage assessments, standards for data and methods, and emerging technologies. Experience an actual test in progress. See description of the Wind Tunnel below. 1 Demo 8:45 am departure
- **Target Generator Facility- Building 300, 2nd Floor: (25 people Ages 7 & Up)**
Interact & listen as pilots and controllers communicate with one another. See how we simulate “scenarios”. Learn about: targets, aircraft Ids, altitude, etc. 2 Demos 8:50 am departure; 1:05 pm departure

- **Tower/TRACON Simulation & Modeling Facility: (25 people Ages 11 & Up)**
 Combines 51' X 60' assembly area to model a full-scale atc tower cab or TRACON room configuration. There is also a 360 degree Tower Cab simulation suite that gives the feeling of being in a real tower. 2 Demos 8:45 am departure; 10:00 am departure

- **Wind Tunnel – Building 204: (20 people – Ages 11 & Up)**
 Learn about the Low Turbulence, Low-Speed Wind Tunnel's electrically driven simulation, reaching speeds of zero to 160 mile per hour winds. By accurately measuring six key components of maintaining aircraft stability, including lift, yaw (twisting sideways), pitch (movement up and down) and others, the lab can research and recommend safety upgrades. Manufacturers build aircraft wings with the ability to bend almost straight up.
 The Environmental Test Chamber measures preset temperature, humidity and air pressure conditions of a flight from takeoff to landing. The chamber studies various fire conditions at particular altitudes, wing ice detectors and other environmental sensors. Learn about testing done in the tunnel and walk into the wind tunnel. Bring your cameras. Children can hear their echo. 1 Demo 2:05 pm departure

- **United States Coast Guard – Building 350: (25 people each age group)**
 Climb into the choppers; see equipment used; learn more about preparations necessary for a “run” at the Coast Guard Ground Unit Atlantic City. See the helo demo. 1 Demo - 5 - 6 Only; 7 - 10, 11 & Up only) 12:45 pm departure